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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,920	10/06/2003	Steven J. Terrell	234-0002US	2909

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WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI,
P.C.
20333 SH 249
SUITE 600
HOUSTON, TX 77070

EXAMINER

VALENTI, ANDREA M

ART UNIT PAPER NUMBER

3643

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,920

Applicant(s)

TERRELL, STEVEN J.

Examiner

Andrea M. Valenti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-73 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-73 in the reply filed on 25 June 2004 is acknowledged.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: page 8, first line, lip #258. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-12, 14, 17-19, 28, 29, 31-34, 36-42, 44, 47, 48, 50, 51, 52, 55-58, 60-64, 66, 68, 72, 73 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,329,752 to Milbourn.

Regarding Claims 1, 18, 55, and 56, Milbourn teaches an apparatus for trimming and chemically treating vegetation, comprising: at least one saw blade (#42) for trimming the vegetation; and a sprayer (Fig. 10 #82) for spraying a chemical treatment on the vegetation in the proximity of the at least one saw blade (Fig. 6); an elongated arm having a top, bottom, sides, and ends (#30).

Regarding Claims 32, 48, 72 and 73, Milbourn teaches a vehicle (#2) for trimming and chemically treating vegetation, comprising: a boom (#8) attached to the vehicle, a tank (#90) attached to the vehicle for holding a chemical treatment; and an apparatus attached to an end of the boom, the apparatus comprising: at least one saw blade (#42) for trimming the vegetation; and a sprayer (#82) coupled to the tank by a hose for spraying the chemical treatment on the vegetation.

Regarding Claims 2, 33 and 57, Milbourn the at least one saw blade is affixed to a saw arm, and wherein the sprayer is affixed in or to the saw arm (Fig. 1 #30).

Regarding Claims 3, 19, 34, and 58, Milbourn inherently teaches the saw blade (#42) spans above and below the saw arm (#30), and wherein the sprayer sprays the chemical treatment above and below the saw arm (do to the broad nature of this claim it is inherent upon the orientation of the boom #8 and the blade arm, if the blade is positioned facing toward the sky it will be above the arm and if it is facing the ground it will be below the arm).

Regarding Claims 6, 36, 50 and 60, Milbourn teaches the apparatus is attachable to a boom (#8) along a first axis, and wherein the saw arm is rotatable around a second axis perpendicular to the first axis (#12 and 24).

Regarding Claims 7, 37, 51 and 61, Milbourn teaches the apparatus is attachable to a boom (#8) along a first axis, and wherein the apparatus is rotatable around the first axis (#12 and 24).

Regarding Claims 8, 38, 52 and 62, Milbourn teaches the apparatus is attachable to a boom (#8) along a first axis, and wherein the apparatus is bendable at an angle with respect to the first axis (#12 and 24).

Regarding Claims 9, 39 and 63, Milbourn teaches the apparatus is attachable to a boom (#8) along a first axis, and wherein the saw arm is rotatable around a second axis perpendicular to the first axis, the apparatus is rotatable around the first axis, and the apparatus is bendable at an angle with respect to the first axis (#12 and 24).

Regarding Claims 10, 40 and 64, Milbourn teaches the apparatus further comprises at least one jaw (#38) for grabbing the vegetation to be trimmed.

Regarding Claims 11, 41 and 65, Milbourn teaches the jaws are serrated (#38).

Regarding Claims 12, 17, 31, 42, 47 and 66, Milbourn teaches the sprayer sprays the chemical treatment at a location where the at least one saw blade trims the vegetation (Fig. 6).

Regarding Claims 14, 44 and 68, Milbourn teaches the chemical treatment comprises a herbicide (Col. 7 line 6).

Regarding Claim 28, Milbourn teaches at least one channel formed within the elongated arm to pass the chemical treatment to the sprayer assembly (#74 and 84).

Regarding Claim 29, Milbourn teaches the elongated arm comprises two pieces with the channel formed or milled therein (Fig. 3 #30 and 32).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 13, 15, 16, 20-24, 26, 27, 30, 35, 43, 45, 46, 49, 59, 53, 54, 67, 69, 71 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,329,752 to Milbourn.

Regarding Claims 4, 20, 35, 49, 59, 15, 22, 23, 24, 45, 53 and 70, Milbourn is silent on the sprayer comprises a plurality of nozzles formed on a top and bottom of the saw arm. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely the duplication of a known element for a multiple effect and the shifting locations of a known element to apply complete and efficient chemical coverage of the cut area.

Regarding Claims 13, 26, 27, 43, and 67, Milbourn is silent on the apparatus comprises a plurality of saw blades. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the

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modification is merely the duplication of a known element for a multiple effect to cover a large surface are in an efficient motion.

Regarding Claims 5, 16, 21, 46, 54, and 71, Milbourn as modified is silent on at least some of the plurality of nozzles are perpendicular to each other and the first nozzles are flush with the top and bottom of the elongated arm. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely shifting a known spray outlet element to multiple locations for complete coverage of the treated vegetation from both the top and the side of the vegetation.

Regarding Claim 30, Milbourn is silent on the elongated arm comprises a single piece of material and wherein channel is milled thereinto. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely making a known element unitary/integral for ease of manufacturing and assembly and does not present a patentably distinct limitation.

Regarding Claim 69, Mlibourn is silent on the herbicide comprises Krenite. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely a selection of a known herbicide for intended use selected to meet certain cost parameters or availability of products.

Claims 1-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,501,257 to Hickman in view of U.S. Patent No. 6,643,933 to David.

Regarding Claims 1, 55, 56, and 72, Hickman teaches an apparatus for trimming vegetation, comprising: at least one saw blade (Hickman #71a) for trimming the vegetation, but is silent on a sprayer for spraying a chemical treatment on the vegetation in the proximity of the at least one saw blade. However, David teaches a trimming device with a sprayer for spraying chemical treatment (David #24). It would have been obvious to one of ordinary skill in the art to modify the teachings of Hickman with the teachings of David to prevent the spread of fungus as taught by David (David Col. 1 line 13-15).

Regarding Claims 32, 48, and 73, Hickman as modified teaches vehicle (Hickman #20) for trimming and chemically treating vegetation, comprising: a boom (Hickman #21) attached to the vehicle, a tank (David #8) attached to the vehicle for holding a chemical treatment; and an apparatus attached to an end of the boom, the apparatus comprising: at least one saw blade (Hickman #71a) for trimming the vegetation; and a sprayer (David #24) coupled to the tank by a hose for spraying the chemical treatment on the vegetation.

Regarding Claims 2, 18, 19, 33, and 57, Hickman as modified teaches the at least one saw blade is affixed to a saw arm (Hickman #70 and 41), and wherein the sprayer is affixed in or to the saw arm (David Fig. 1 #22 and 24).

Regarding Claims 3, 34, and 58, Hickman as modified teaches the saw blade spans above and below the saw arm, and wherein the sprayer sprays the chemical treatment above and below the saw arm (Hickman #70 and David #22).

Regarding Claims 4, 20, 21, 35, 45, 49, and 59, Hickman as modified teaches the sprayer comprises a plurality of nozzles formed on a top and bottom of the saw arm (David #24 Fig. 3).

Regarding Claims 5 and 46, Hickman as modified is silent on the sprayer further includes at least one further nozzle formed perpendicularly to the plurality of nozzles. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely shifting a known spray outlet element to multiple locations for complete coverage of the treated vegetation from both the top and the side of the vegetation.

Regarding Claims 6, 36, 50, and 60, Hickman as modified teaches the apparatus is attachable to a boom (Hickman #21) along a first axis, and wherein the saw arm is rotatable around a second axis perpendicular to the first axis (Hickman Figs. 1 and 2).

Regarding Claims 7, 37, 51, and 61, Hickman as modified teaches the apparatus is attachable to a boom (Hickman #21) along a first axis, and wherein the apparatus is rotatable around the first axis (Hickman Figs. 1 and 2).

Regarding Claims 8, 38, 52, and 62, Hickman as modified teaches the apparatus is attachable to a boom (Hickman #21) along a first axis, and wherein the apparatus is bendable at an angle with respect to the first axis (Hickman Figs. 1 and 2).

Regarding Claims 9, 39, and 63, Hickman as modified teaches the apparatus is attachable to a boom (Hickman #21) along a first axis, and wherein the saw arm is rotatable around a second axis perpendicular to the first axis, the apparatus is rotatable around the first axis, and the apparatus is bendable at an angle with respect to the first axis (Hickman Figs. 1 and 2).

Regarding Claims 10, 40, and 64, Hickman as modified teaches the apparatus further comprises at least one jaw (Hickman #77) for grabbing the vegetation to be trimmed.

Regarding Claims 11, 41, and 65, Hickman as modified is silent on the jaws being serrated. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely a notoriously well-known means of providing a strong friction grip to secure the object.

Regarding Claims 12, 17, 31, 42, 47, and 66, Hickman as modified teaches the sprayer sprays the chemical treatment at a location where the at least one saw blade trims the vegetation (David #24).

Regarding Claims 13, 26, 27, 43, and 67, Hickman as modified teaches the apparatus comprises a plurality of saw blades (Hickman #71a, 72a, 73a).

Regarding Claims 14, 44, and 68, Hickman as modified teaches a chemical treatment, but is silent on herbicide. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely the selection of an alternate old and well-known chemical

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treatment selected in situations where one desires not to have the vegetation grow back.

Regarding Claims 15, 53 and 70, Hickman as modified teaches the sprayer comprises a plurality of nozzles (David #24).

Regarding Claims 16, 54, and 71, Hickman as modified is silent on the nozzles in a perpendicular orientation. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely shifting a known spray outlet element to multiple locations for complete coverage of the treated vegetation from both the top and the side of the vegetation.

Regarding Claims 22, 23, and 24, Hickman as modified teaches the sprayer assembly further comprises at least one second nozzle formed on a side of the elongated arm (David Fig. 3).

Regarding Claim 25, Hickman as modified is silent on the second nozzles pop up beyond the side of the elongated arm when activated. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely the selection of a known alternate equivalent spray head selected as a manufacturing design choice based on cost, availability of parts, etc.

Regarding Claim 28, Hickman as modified teaches at least one channel formed within the elongated arm to pass the chemical treatment to the sprayer assembly (David Fig, 3 #24 and 32).

Regarding Claim 29, Hickman as modified teaches the elongated arm comprises two pieces with the channel formed or milled therein (David Fig. 9, 11, 13, 15, 17, 21, 24, 27, 30).

Regarding Claim 30, Hickman as modified is silent on the elongated arm comprises a single piece of material and wherein channel is milled thereinto. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely a manufacturing design choice for ease of manufacturing and does not present a patentably distinct limitation.

Regarding Claim 69, Hickman as modified is silent on the herbicide comprises Krenite. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely a selection of a known herbicide for intended use selected to meet certain cost parameters or availability of products.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,220,773; U.S. Patent No. 4,291,492; U.S. Patent No. 5,143,131; U.S. Patent No. 5,050,303; U.S. Patent No. 6,125,621; U.S. Patent No. 6,439,279; U.S. Patent No. 4,926,622; U.S. Patent No. 5,426,854; U.S. Patent No. 5,987,862; U.S. Patent No. 5,503,201; U.S. Patent Pub. No. US 2004/0045166; U.S. Patent No. 3,017,121; and PCT WO 9304574.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 703-305-3010. The examiner can normally be reached on 7:30am-5pm M-F; Alternating Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrea M. Valenti
Patent Examiner
Art Unit 3643

14 September 2004



Peter M. Poon
Supervisory Patent Examiner
Technology Center 3600